

AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) A method for identifying transmitters in a wireless communication system, comprising:
 - obtaining a plurality of received signals for a plurality of transmitters, wherein the plurality of received signals are received by a user terminal; and
 - determining a transmitter for each received signal by
 - determining a measured power for the received signal,
 - determining a list of a plurality of candidate transmitters for the received signal,
 - obtaining predicted power for each candidate transmitter in the list, and
 - identifying the transmitter for the received signal based on predicted powers for the candidate transmitters and measured power for the received signal.
2. (Original) The method of claim 1, wherein the determining the transmitter for each received signal further includes
 - comparing the predicted power for each candidate transmitter against the measured power for the received signal, and wherein the identified transmitter for the received signal is the candidate transmitter with predicted power closest to the measured power.
3. (Original) The method of claim 1, wherein the determining the transmitter for each received signal further includes
 - determining a coverage zone to use for the received signal, and wherein the predicted power for each candidate transmitter is obtained based on the coverage zone.
4. (Original) The method of claim 3, wherein the predicted power for each candidate transmitter is obtained for a centroid of the coverage zone.
5. (Original) The method of claim 3, wherein the coverage zone is derived based on one or more coverage areas of one or more identified transmitters.

6. (Original) The method of claim 1, wherein the predicted power for each candidate transmitter is determined based on a path loss prediction model.
7. (Original) The method of claim 6, wherein the path loss prediction model is based on Okumura-Hata model.
8. (Original) The method of claim 1, wherein the predicted power for each candidate transmitter is determined based on field data.
9. (Original) The method of claim 1, wherein the wireless communication system is a CDMA system.
10. (Previously Presented) The method of claim 9, wherein the list of candidate transmitters for each received signal comprises a list of base station transceivers (BTSs) with same PN offset.
11. (Original) The method of claim 1, wherein the determining the transmitter for each received signal further includes
obtaining predicted propagation delay for each candidate transmitter in the list,
and
wherein the transmitter for the received signal is further identified based on predicted propagation delays for the candidate transmitters and measured propagation delay for the received signal.
12. (Original) The method of claim 11, wherein the determining the transmitter for each received signal further includes
determining a power delta for each candidate transmitter as a difference between the predicted power for the candidate transmitter and the measured power of the received signal,
determining a propagation delay delta for each candidate transmitter as a difference between the predicted propagation delay for the candidate transmitter and the measured propagation delay for the received signal, and

obtaining a weighted sum of the power delta and the propagation delay delta for each candidate transmitter, and wherein the identified transmitter for the received signal is the candidate transmitter with a smallest weighted sum.

13. (Currently Amended) A method for determining transmitters in a wireless communication system, comprising:

obtaining a plurality of received signals for a plurality of transmitters, wherein the plurality of received signals are received by a user terminal;

determining measured power for each of the plurality of received signals; and

determining a transmitter for each received signal by

determining a list of candidate transmitters for the received signal,

determining an identified transmitter,

determining measured power of the identified transmitter,

obtaining predicted power for each candidate transmitter in the list,

obtaining predicted power for ~~an~~ the identified transmitter,

determining the transmitter for the received signal based on predicted powers for the candidate transmitters, the predicted power for the identified transmitter, measured power of the received signal, and measured power for the identified transmitter.

14. (Original) The method of claim 13, wherein the determining the transmitter for each received signal further includes

comparing a relative predicted power for each candidate transmitter against a relative measured power for the received signal, the relative predicted power being a difference between the predicted power for the candidate transmitter and the predicted power for the identified transmitter, the relative measured power being a difference between the measured power of the received signal and the measured power for the identified transmitter, and

wherein the identified transmitter for each received signal is the candidate transmitter with relative predicted power closest to the relative measured power.

15. (Original) The method of claim 13, wherein the determining the transmitter for each received signal further includes
determining a coverage zone to use for the received signal based on one or more coverage areas of one or more identified transmitters, and wherein the predicted power for each candidate transmitter is obtained based on the coverage zone.

16. (Original) The method of claim 13, wherein the wireless communication system is a CDMA system.

17. (Original) The method of claim 13, wherein the determining the transmitter for each received signal further includes
obtaining predicted propagation delay for each candidate transmitter in the list,
and
obtaining predicted propagation delay for the identified transmitter, and
wherein the transmitter for the received signal is further identified based on predicted propagation delays for the candidate transmitters, the predicted propagation delay for the identified transmitter, measured propagation delay for the received signal, and measured propagation delay for the identified transmitter.

18. (Original) The method of claim 17, wherein the determining the transmitter for each received signal further includes
determining a relative power delta for each candidate transmitter,
determining a relative propagation delay delta for each candidate transmitter,
and
obtaining a weighted sum of the relative power delta and the relative propagation delay delta for each candidate transmitter, and wherein the identified transmitter for the received signal is the candidate transmitter with a smallest weighted sum.

19. (Currently Amended) An apparatus operable to identify transmitters in a wireless communication system, comprising:

means for obtaining a plurality of received signals for a plurality of transmitters, wherein the plurality of received signals are received by a user terminal;

means for determining a plurality of lists of candidate transmitters for the plurality of received signals, one candidate list for each received signal;

means for obtaining predicted power for each candidate transmitter;

means for determining a measured power for each of the plurality of received signals; and

means for identifying the transmitter for each received signal based on measured power for the received signal and predicted powers for the candidate transmitters in the list determined for the received signal.

20. (Original) The apparatus of claim 19, further comprising:

means for determining a coverage zone to use for each received signal, and wherein the predicted power for each candidate transmitter of each received signal is obtained based on the coverage zone for the received signal.

21. (Original) The apparatus of claim 19, wherein the predicted power for each candidate transmitter is determined based on a path loss prediction model.

22. (Original) The apparatus of claim 21, wherein the path loss prediction model is based on Okumura-Hata model.

23. (Original) The apparatus of claim 21, further comprising:
means for storing information used for the path loss prediction model.

24. (Original) The apparatus of claim 19, further comprising:
means for obtaining predicted power for an identified transmitter for each received signal, and wherein the transmitter for each received signal is further identified based on the predicted power for the identified transmitter for the received signal.

25. (Original) The apparatus of claim 19, further comprising:

means for obtaining predicted propagation delay for each candidate transmitter, and

wherein the transmitter for each received signal is further identified based on measured propagation delay for the received signal and predicted propagation delays for the candidate transmitters in the list determined for the received signal.

26. (Original) The apparatus of claim 19, wherein the wireless communication system is a CDMA system.

27. (Currently Amended) A computer-readable medium encoded with software code ~~program product~~ for identifying transmitters in a wireless communication system, comprising:

code for obtaining a plurality of received signals for a plurality of transmitters;
wherein the plurality of received signals are received by a user terminal;

code for determining a plurality of lists of candidate transmitters for the plurality of received signals, one candidate list for each received signal;

code for obtaining predicted power for each candidate transmitter;

code for obtaining measured power for each received signal; and

code for identifying the transmitter for each received signal based on measured power for the received signal and predicted powers for the candidate transmitters in the list determined for the received signal; and

~~— a computer usable medium for storing the codes.~~